APPENDIX A

- A composition comprising a first polynucleotide that hybridizes to a second, Bcl-2encoding polynucleotide under intracellular conditions and a neutral lipid associated with said first polynucleotide.
- 2. The composition of claim 1, wherein said first polynucleotide is an oligonucleotide having a length of between about 8 and about 50 bases.
- 3. The composition of claim 1, wherein the first polynucleotide is complementary to the translation initiation site of Bcl-2 mRNA.
- 4. The composition of claim 3, wherein the polynucleotide is an oligonucleotide comprising the sequence CAGCGTGCGCCATCCTTC (SEQ ID NO:1).
- 5. The composition of claim 1, comprising a liposome formed from the lipid.
- 6. The composition of claim 5, wherein the first polynucleotide is encapsulated in the liposome.
- 7. The composition of claim 1, wherein the lipid is a phosphatidylcholine, a phosphatidylglycerol, or a phosphatidylethanolamine.
- 8. The composition of claim 7, wherein the lipid is dioleoylphosphatidylcholine.
- 9. A composition comprising an expression construct that encodes a first polynucleotide that hybridizes to a second, Bcl-2-encoding polynucleotide under intracellular conditions, wherein

said construct is under the control of a promoter that is active in eukaryotic cells and associated with a neutral lipid.

- 10. A method of inhibiting proliferation of a Bcl-2-associated disease cell comprising obtaining a first polynucleotide that hybridizes to a second polynucleotide under intracellular conditions, mixing the first polynucleotide with a neutral lipid to form a composition comprising a polynucleotide/lipid association, and administering said association to said Bcl-2-associated disease cell to inhibit the proliferation of said disease cell, wherein said cell has a t(14;18) translocation, and wherein the second polynucleotide comprises at least 8 bases of the translation initiation site of Bcl-2 mRNA.
- 11. The method of claim 10, wherein the cell is a cancer cell.
- 12. The method of claim 11, wherein said cancer cell is a follicular lymphoma cell.
- 13. The method of claim 10, wherein said first polynucleotide is an oligonucleotide having a length of between about 8 and about 50 bases.
- 14. The method of claim 10, comprising a liposome formed from the lipid.
- 15. The method of claim 14, wherein the liposome encapsulates the first polynucleotide.
- 16. The method of claim 10, wherein said administering takes place in an animal.
- 17. The method of claim 16, wherein said animal is a human.

- 18. The method of claim 17, wherein said composition is delivered to said human in a volume of 0.50-10.0 ml per dose.
- 19. The method of claim 17, wherein said composition is delivered to said human in an amount of from about 5 to about 30 mg polynucleotide per m².
- 20. The method of claim 19, wherein said composition is administered three times per week for eight weeks.
- 21. A method of inhibiting proliferation of a Bcl-2-associated disease cell having a t(14;18) translocation comprising:
- (a) obtaining an oligonucleotide nucleotide of from about 8 to about 50 bases and complementary to at least 8 consecutive bases of the translation initiation site of Bcl-2 mRNA;
- (b) mixing the oligonucleotide with a neutral lipid to form a neutral oligonucleotide/lipid association; and
- (c) administering said association to said Bcl-2-associated disease cell to inhibit the proliferation of said disease cell.
- 22. The method of claim 21, wherein the cell is a cancer cell.
- 23. The method of claim 22, wherein said cancer cell is a follicular lymphoma cell.
- 24. The method of claim 21, comprising a liposome formed from the lipid.
- 25. The method of claim 24, wherein the liposome encapsulates the polynucleotide.

- 26. The method of claim 21, wherein said administering takes place in an animal.
- 27. The method of claim 26, wherein said animal is a human.
- 28. The method of claim 27, wherein said composition is delivered to said human in a volume of 0.50-10.0 ml per dose.
- 29. The method of claim 27, wherein said composition is delivered to said human in an amount of from about 5 to about 30 mg polynucleotide per m².
- 30. The method of claim 29, wherein said composition is administered three times per week for eight weeks.
- 31. A neutral lipid oligonucleotide association comprising a neutral lipid associated with an oligonucleotide of from about 8 to about 50 bases and complementary to at least 8 bases of the translation initiation site of Bcl-2 mRNA.
- 32. The neutral lipid oligonucleotide association of claim 31, wherein the oligonucleotide has the sequence CAGCGTGCGCCATCCTTC (SEQ ID NO:1).
- 33. The neutral lipid oligonucleotide association of claim 31, comprising a liposome formed from the lipid.
- 34. The neutral lipid oligonucleotide association of claim 33, wherein the oligonucleotide is encapsulated in the liposome.

- 35. The neutral lipid oligonucleotide association of claim 31, wherein the lipid is a phosphatidylcholine, a phosphatidylglycerol, or a phosphatidylethanolamine.
- 36. The neutral lipid oligonucleotide association of claim 35, wherein the lipid is dioleoylphosphatidylcholine.
- 37. A composition comprising a neutral lipid associated with an expression construct that encodes an oligonucleotide of from about 8 to about 50 bases and complementary to at least 8 bases of the translation initiation site of Bcl-2 mRNA, wherein the construct is under the control of a promoter that is active in eukaryotic cells.